Keeping families of heroin addicts together: results of 13 months’ intake for community detoxification and rehabilitation at a family centre for drug users

Jenny Keena, Phillip Oliverb, Georgina Rowsec and Nigel Mathersd


Background. Heroin addiction is a major public health problem affecting both the addicted individuals and their children, who have been shown to have poor social, educational and health status and to be at higher risk of abuse than their peers. Whilst the antenatal effects of parental drug use and the overall poor outcomes for these children have been widely studied, there has been little emphasis on the effectiveness of treatment interventions and even less emphasis on evaluating the effect on children of the standard treatments aimed at their parents’ drug use.

Objectives. The aim of the present study was to evaluate the effect on heroin-addicted parents and their children of a family-based drug treatment intervention using a records-based methodology, and to identify any factors at admission which may influence outcome. This study is a pilot for a prospective Europe-wide study using a similar methodology prospectively in several treatment modalities.

Methods. A retrospective cohort study was carried out using existing clinical and residential record data. The setting was a residential family centre run by the charity Phoenix House in Sheffield, UK, offering a 6-month (180 days) family-based programme for heroin addicts including community detoxification overseen by primary care specialist doctors and residential rehabilitation. All adults and children who entered the centre between July 1997 and July 1998 were included in the study (26 adults and 33 children, in 23 family groups). An analysis was made of clinical records and records kept on the adults and children by the clinicians and staff at the centre. The main outcome measures for the adults were length of stay and reason for departure (treatment complete, early planned discharge, unplanned discharge, eviction); and for the children were reason for departure and discharge destination (with parent or taken into care).

Results. Mean length of stay was 110 days, and only 11 children (33%) and nine adults (35%) completed 150 days or more. Length of stay was found to be significantly correlated with parental age at admission ($P < 0.01$). Twelve children (37%) and nine adults (35%) were deemed to have completed treatment successfully. Of the remainder, 14 children (42%) and 11 adults (42%) left because of definite treatment failure. Successful treatment completion was found to be correlated with increased parental age (Pearson’s $r = 0.612$, $P = 0.001$). Poly-drug users were significantly less likely to complete treatment successfully (Fisher’s exact test, $P = 0.012$). Twenty children were in the care of their parents on admission, and 24 were able to go home with their parents. There was no association between residence with parents pre- and post-admission (McNemar’s chi-squared test = 1.6, $P > 0.1$).

Conclusions. Whilst overall high rates of treatment success are not expected in abstinence-based programmes, the outcomes for the adults in this setting are comparable with published results in other residential settings, and there is some evidence that some families may have stayed together who might otherwise have been separated. Older adults who were not poly-drug users had significantly better outcomes. The records-based methodology proved successful,
but centres need to keep detailed and preferably long-term records on children if their outcomes are to be evaluated more fully.

**Keywords.** Addiction, children, heroin, outcomes, treatment.

**Introduction**

Heroin addiction affects an estimated 0.2–0.3% of the population of the European Union. The majority of these individuals are of childbearing age and many have children. The adverse effects on these children of their parents’ drug use has been widely studied. However, very little work has been done to assess the effect on these children of providing their addicted parents with the normal and routinely used treatments for their drug problems. Children’s outcomes are at best only secondary to the main goals measured by most studies of treatment. For this reason, data regarding children are often left uncollected. Nonetheless, these children form a growing and significant group whose needs increasingly are relevant to service providers, and evidence on children’s outcomes is needed if policy makers are to make evidence-based decisions regarding resources for drug treatment. This 13-month retrospective study in a single treatment setting forms part of a pilot developing a records-based methodology for evaluation of children's outcomes. The secondary objective is to pilot a records-based methodology for evaluation of children’s outcomes in this field.

**The evidence base**

Previous work in the field has focused on the adverse effects on children of parental drug abuse and has often had difficulty in disentangling the effects of antenatal drug exposure from the effects of the home environment. Nonetheless, there is evidence that for whatever reason, children of some drug-addicted parents appear to be developmentally and behaviourally disadvantaged at least until the age of 14–15 years. Specifically, children of drug-addicted mothers seem less likely to remain with their birth mother, more likely to show developmental delay, to use more health services than the general population and to be significantly more at risk of abuse and neglect. However, those children of addicted parents who subsequently are removed from the home environment may be spared many of these adverse effects.

The problems of children of heroin users have been addressed by a variety of therapeutic interventions including family therapy and home intervention, and these have been studied in terms of their effect on the children. However, little or no work has been done to evaluate the effects on children of the standard treatments aimed primarily at their parents’ drug problem. These standard interventions include the vast majority of treatment regimens, including methadone treatments, residential and other detoxification programmes, and a variety of non-prescribing interventions. There is a great deal of evidence to suggest that at least some of these have a major stabilizing influence on the users themselves which might be expected to have an effect on the lives of their children.

The treatment studied in this pilot is residential detoxification and rehabilitation in the relatively unusual setting of a family centre in which the addicted parent(s) and their dependent children are admitted together.

**Research objectives**

The primary objective of the study is to evaluate the impact of community-based family detoxification and rehabilitation for drug users on heroin addicts and their accompanying children, and to identify any factors at admission which may be associated with more successful outcomes. The secondary objective is to pilot a records-based methodology for evaluation of children’s outcomes in this field.

**Methods**

The study design was a retrospective cohort study using existing clinical and residential record data. The setting was the Phoenix House Family Centre, Sheffield. The study was carried out during February–July 1999.

**The intervention**

The Sheffield Family Centre is run by the charity Phoenix House which provides abstinence-based rehabilitation facilities for drug users in the USA and the UK. The centre has places for ~10 families. Referrals of families are from social services departments nationwide and assessment of addicted parents is carried out by Phoenix House staff. The philosophy is abstinence based in that its primary aim is withdrawal from all drugs for the parent. However, it aims to address childcare issues alongside issues of addiction and to help parents learn parenting skills at the same time as addressing their own drug problems. Families with one or both parents are admitted with the dependent child(ren), and parents are supported in taking responsibility for their child(ren).

Standard treatment is for 6 months. Parents are encouraged to reduce their drug use to a minimum before admission, but in-house detoxification is provided under the medical supervision of two primary care specialist doctors if necessary. During the admission, parents attend a number of formal and informal group sessions on parenting skills as well as structured groups regarding addiction issues. The treatment is paid for by the social services departments responsible for the families.
At the time of the study, detoxification treatment involved reducing doses of methadone over a period of several days, sometimes with the addition of lofexidine and/or benzodiazepines.

Discharge of a family ideally is by arrangement between the funding body, staff and parents. Unscheduled discharges may take place at the request of the parent(s), and contingency plans exist for the children where these are the subject of care orders. Early discharges may be negotiated, but evictions may also occur should parents fail to comply with house rules (e.g. by persistently using drugs).

Participants and entry criteria
All adults and children who entered the centre during the 13 months from July 1997 to July 1998 were selected as participants. This time frame was selected in order to access the maximum number of computerized records kept at the centre whilst ensuring that all subjects had in fact completed their treatment at the time of the study.

Data collection
Names of eligible subjects were derived from routine statistical returns according to the above entry criteria. The routine admissions database was accessed by researchers in order to establish which parents and children were admitted during the period of study, and to collect demographic data on the adults from their original assessment at the centre. An analysis of clinical and in-house records was then carried out by a clinician attached to the centre to establish what treatment if any was used in detoxification of the parents and for how many days. Similarly, the children’s legal and residential status at entry and at discharge and the reasons for departure of the families were established using the centre’s records of their admission. Because of the retrospective nature of the study, it was not possible for the researchers to specify in advance which data should be collected. The baseline data set was therefore selected from available recorded data in order to allow the following analysis: establishment of the demographic profile of the subjects at entry; comparison with outcome data where possible; and determination of any factors which might appear to influence outcome. Data regarding outcomes were limited similarly by what was collected routinely. This did not include any outcomes after the subjects had left the centre. Two separate databases were set up for adults’ and children’s data and were analysed separately using the statistics package for social sciences (SPSS) version 9.

Baseline measures at entry
In practice, this meant that for the adults, general demographic data as well as drug abuse profile data and clinical data regarding detoxification were collected. For the children, data collected were general demographics, place of residence immediately prior to entry (with parent or in the care of the local authority) and Child Protection status (whether or not the child had formally been assessed as ‘at risk’ and for what reason).

Outcome measures
The outcomes measures for the adults were the number of days of stay and the reason for departure from the centre, which were classified as follows: treatment complete, early planned discharge, unplanned discharge or eviction. For the children, the outcome measures were reason for departure (as for the adults) and discharge destination (to live with parent or to the care of the local authority).

Results
The adults at entry
Twenty-six adults were admitted to the centre during the study period with a mean age of 27 years (range 20–41 years). Four were men and 22 were women. There were three couples which included three of the men. All the others came in as lone parents, although four of these described themselves as having a long-term partner. Nineteen of the 26 parents required an in-house medical detoxification, and the remainder had completed detoxification immediately prior to entry. The main drug of abuse (21 out of the 26 adults) was heroin.

Twenty of the 26 parents were regularly using more than one drug, and 18 of them were current injectors. Mean length of addiction to the main drug of abuse was 8.8 years (range 1.5–27.5 years). Mean age of first addiction was 19 years (range 13–25 years). Ten of the adults were in receipt of a methadone prescription immediately prior to admission.

The 26 parents were accompanied by 33 children who were admitted with them. Twelve of the parents had an additional total of 21 children who were elsewhere, including three who were known to be in care.

None of the parents had any form of employment immediately prior to admission although 20 of them had worked at some point. Mean length of time unemployed amongst these 20 was 12 years 4 months. Three of the parents described themselves as homeless.

Nine of the parents had left school with no qualifications, but 12 had achieved GCSE-level (16+) education and two had gone on to some form of further education.

Twenty-two parents described themselves as white and four black, of which none were Asian.

Nineteen parents received in-house detoxification. Detailed clinical data were available for 17 of these. All received oral methadone mixture; two received benzodiazepines in addition, six received lofexidine and a further six received both. Mean start dose of methadone was 34 mg daily (range 20–50 mg) and mean number of days in detoxification was 9 (range 6–20).
The children at entry
Thirty-three children were in the sample, 22 male and 11 female, belonging to a total of 23 family groups. Mean age on admission was 3 years 4 months (range 0–12 years). Three of the children were admitted as newborns (0–2 months). Six of the children were accompanied by both parents in the centre.

Twenty of the children (counting the three newborns) were living with the parent(s) prior to admission, but 13 were with relatives or in care. Seventeen of the 33 children were recorded as being on the Child Protection Register, 11 in the category ‘likely to neglect’ and six ‘actual neglect’. Of these 17, 10 were living with the parent(s) prior to admission and seven were not. Twelve children were known to be living with one or more parents who currently were heroin injectors immediately prior to admission.

Outcomes for families
Length of stay. Retention in treatment has been identified in previous studies as an important prognostic factor in predicting likely long-term treatment success. The treatment programme at the centre is of 6 months' duration (~180 days). In general, funding for this length of time is agreed at the outset and early departure means a treatment failure, although in exceptional cases staff may agree that a family is ready to leave early. With one exception (one adult left alone), the families arrived and left together. Mean length of stay for the adults and children was 110 days (range 13–275). Six children (18%) stayed at the centre for less than 2 weeks, and a total of 16 children (48%) did not stay any longer than 3 months. Only 11 out of the 33 children (and nine out of the 24 adults) completed 150 days or more at the centre.

Reason for departure. Twelve of the 33 children (37%) and nine of the 26 adults left the centre after their families were deemed to have completed treatment successfully. A further seven children (21%) and six adults were classified as ‘planned’ early family departures, and no further information is available as to whether these could be termed successes or failures. Of the remaining 14 children and 11 adults, eight children’s departures (24%) and five adults’ were unplanned, and six children (18%) and six adults left after their families were evicted. The latter two categories can be classified as treatment failures.

Destination of child. Prior to admission, 20 children were in the care of their parent(s) (Table 1). Of these, 17 remained in the care of the parent(s) at discharge. Of the 13 who were not with the parent(s) prior to admission, seven were discharged to the parent(s)’ care. In total, therefore, 20 children were in the care of their parent(s) on admission, and 24 were able to go home with the parent(s). There was no association between residence with the parent(s) pre-admission and discharge with the parent(s) (McNemar’s chi-squared test = 1.6, $P > 0.1$). This suggests that factors other than the child’s previous place of residence influenced the decision regarding the children’s discharge destination. These factors might include the effects of the intervention.

All the 12 children whose parents completed treatment were allowed home with the parents: this included five who were on the at-risk register and four who were not with the parent prior to admission. Of the six whose families were evicted, three remained with the parent, as did three out of seven planned early discharges and six out of eight unplanned discharges. Of the 17 children known to be on the at-risk register, 10 were living with the parent(s) prior to admission, and 10 were discharged with the parent, but only five of these were the same children.

Factors affecting outcome
Long-term outcome data were not available for these patients, but patients who were categorized as having been discharged because of successful treatment completion were defined as short-term treatment successes. In addition, because of its known association with long-term outcomes for drug users, length of retention in treatment was selected as a marker for long-term success in treatment.

Successful treatment completion was found to be associated with increasing parental age ($P < 0.01$). Poly-drug users were significantly less likely to complete treatment successfully (Fisher’s exact test, $P = 0.012$). Length of stay at the centre was also found to be significantly correlated with age at admission (Pearson’s $r = 0.612$, $P = 0.001$). No association was found between length of stay and any other characteristic at admission, although for a number of variables the numbers were too small for statistical analysis.

No other significant relationships were found in this study.

Discussion
In spite of the small sample size used in this pilot study, we have demonstrated that in a supportive environment,
some ‘heavy-end’ users can achieve abstinence from all drugs at least until discharge, and this may be instrumental in keeping or bringing together families for whom the only other option was long-term care for the child. We have also shown that there may be factors at entry to treatment (i.e. older age and lack of poly-drug use) which can predict which adults are likely to be successful.

The relatively small number of people ‘successfully’ discharged may reflect the overall problems of retention in abstinence-based programmes. As an alternative to programmes where parents are deliberately separated from children for the duration of treatment and compared with the early results of the NTORS study, this study of early outcomes suggests that retention in treatment is likely to be comparable with that of programmes where children are not present. There is, however, no way of comparing the children’s outcomes with those from programmes where the parent goes alone into residential treatment, because the families at the family centre are often selected for referral as those which are on the brink of breakdown should the drug treatment fail.

Straightforward interpretation in terms of success or failure is not possible, however, and any interpretation of the results of this pilot study must contend with two problem areas. The first is the relative lack of data routinely collected by the centre regarding outcomes for both parents and children, in particular long-term outcome data, without which any conclusions drawn from the study must be treated with caution. The second is the difficulty of ascertaining what constitutes a ‘good’ outcome for the children. It could be argued that the aim of keeping families together only delays the inevitable reception into care for some children, whereas an early admission of treatment failure for the parent may enable social services staff to arrange appropriate alternative care for these children at an earlier stage. Furthermore, there may be a risk that a facility such as this one may attract referrals made in an attempt to keep a child with natural parents who are in reality never going to succeed in caring for that child, and who may really require maintenance treatment. These parents may agree to enter detoxification simply because they perceive no other way to avoid losing the child, and ultimately may fail. On the other hand, if a unit such as this can prevent breakdown of some families, this is surely an important outcome with social and cost benefits.

In terms of actual costs, at ~£500 per family member per week, this is not a cheap option. Treating the adult(s) separately from the child(ren) in the parallel Phoenix House Adult Centre costs ~£300 per adult per week plus the costs of fostering for the child(ren). Methadone maintenance treatment, by contrast, costs £500–£1000 per patient per year, and can also impact positively on factors affecting family stability. However, in successful cases at the family centre, a family may be kept together, thereby saving the financial and social costs of the child(ren) entering the care system long term. As distinct from other treatment options, the potential long-term costs of a family traumatized by separation during the parent’s treatment or the consequences for the child of continuing to live with a long-term maintained drug user may be avoided. On the other hand, a treatment failure is expensive and the goal of abstinence notoriously difficult to achieve. The short-term investment must therefore be weighed against the potential long-term alternatives, taking account of the relative likelihood of success.

The record-based methodology for evaluation of children’s outcomes proved successful in providing crude indicators of treatment success or failure and in allowing identification of factors which may influence outcome. However, a questionnaire-based component would allow a more in-depth interpretation of these data in future research.

Conclusions

This study investigates the effect on families of treating the parental drug use in a residential family-based environment. It suggests that a cautious optimism may be appropriate with regard to this type of treatment, and that older parents who are not poly-drug users may have the best outcomes. The study also pilots the use of routinely collected data regarding outcomes for drug-abusing families, without becoming involved in complex examination and assessment of parents and children. Whilst the methods and outcome measures were successful within the confines of this study, the research was hampered by a lack of routinely collected data especially regarding the children. In particular, longer term outcomes in terms of parental abstinence from drugs and placement of the children are essential for a full evaluation and comparison with existing literature.

Acknowledgement

The authors would like to thank Dr Roger Smith and staff at the Phoenix House Family Centre, Sheffield.

References

Family treatment for heroin addicts


7 Svenson L, Forster D *et al.* Individuals with a chemical-dependent family member—does their healthcare use increase? *Can Fam Physician* 1995; 41: 1488–1493.


